

Natural Resources Geographic Information Systems (NR-GIS)

The purpose of this report is to provide the City of Lincoln and Lancaster County community with a synopsis of the results of the Natural Resources-Geographic Information System (NR-GIS). The NR-GIS endeavor was initiated and fostered under the sponsorship of the City of Lincoln-Lancaster County Planning Department as part of its ongoing geographic information system (GIS) program.

The balance of this report is divided into seven sections offering the reader a look at each individual natural resources element. The natural environment of Lancaster County is composed of many elements, including topography and climate, soils, surface water systems, wetlands, groundwater systems, habitat and vegetation, and wildlife. While this summary report addresses these elements separately, in reality they remain very interconnected. This connectivity is crucial to understanding the natural resources in Lancaster County and is the reason for overlap in several sections of this report.

Purpose, Goals and Objectives of NR-GIS

The primary purpose of the City of Lincoln-Lancaster County Natural Resources-Geographic Information System (NR-GIS) is to bring together pertinent natural resources information in a digital form about Lancaster County (Nebraska) for use in the community's on-going planning process.

At its inception, the NR-GIS study team identified a series of goals and objectives for the effort. These were as follows:

- *The goal of NR-GIS is to provide a factual foundation for integrating natural resources information into the City and County comprehensive and short range planning processes.*
- *The knowledge and analytical tools resulting from this endeavor should serve to plan and implement land use strategies reflecting urban and rural development patterns that are respectful of the earth's natural features and systems.*
- *NR-GIS should also serve to advance the community's awareness and appreciation for the connection and relationships between natural features and the built environment.*

These goals were then used to craft a series of nine objectives serving to further detail the program's intended purpose. These objectives were as follows:

1. Create a unified, well-documented digital information and graphic system (i.e., GIS) encompassing a wide breadth of natural resources features for all of Lancaster County and other surrounding areas as applicable.
2. Utilize readily available digital natural resources information wherever possible, being careful to ensure the integrity and applicability of that data to the planning process.
3. Enhance and expand the natural resources information base where it may not exist today. This may require that we: (a) create digital files from current hard copy data sets; (b) interpret and refine existing digital and hard copy data; and (c) conduct judicious development of natural resources information through primary data collection efforts.